

CLAIMS

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1. A signal processing device for processing a signal by using a memory, comprising:  
compressing means for compressing an amount of information of a video signal by using said memory; and  
generating means for generating a character signal by using said memory.

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2. A device according to claim 1, further comprising:  
combining means for combining the character signal generated by said generating means with the video signal.

3. A device according to claim 2, wherein said compressing means compresses an amount of information of a video signal outputted from said combining means.

4. A device according to claim 3, further comprising:  
outputting means for outputting the video signal the amount of information of which has been compressed by said compressing means to a recording device, said recording device recording the video signal outputted from said outputting means on a record medium.

5. A device according to claim 2, further comprising:  
outputting means for outputting a video signal outputted from said combining means to a display device,

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said display device displaying an image represented by the video signal outputted from said outputting means.

6. A device according to claim 2, wherein said combining means combines the character signal with a video signal captured by image pickup means.

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7. A device according to claim 1, wherein said memory has a first area for storing a video signal an amount of which is to be compressed by said compressing means, a second area for storing a video signal an amount of which has been compressed by said compressing means, and a third area which is different from said first area and said second area, said generating means generating the character signal by using said third area.

8. A device according to claim 7, further comprising: outputting means for reading out from said second area the video signal the amount of which has been compressed and outputting the read-out video signal to a recording device, said recording device recording the video signal outputted from said outputting means on a recording medium.

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9. A device according to claim 1, wherein said memory has a first area which is to be accessed by said compressing means, and a second area which corresponds to an image plane represented by the video signal and which

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is different from said first area, and wherein said generating means comprises memory control means for writing into said second area a plurality of codes representing a value of pixel data of the character signal, and a table for outputting pixel data corresponding to codes read out from said second area.

10. A device according to claim 9, further comprising:

combining means for combining the character signal generated by said generating means with the video signal,

the codes representing control data for controlling a combining operation of said combining means, said combining means performing the combining operation in accordance with the codes.

11. A device according to claim 1, wherein said compressing means comprises orthogonal transform means for orthogonally transforming the video signal, quantization means for quantizing orthogonal transform coefficients from said orthogonal transform means, and variable-length coding means for variable-length-coding an output of said quantization means.

802A6 12. A signal processing device for processing a signal by using a memory, comprising:

expanding means for expanding an amount of

information of a video signal by using said memory; and  
generating means for generating a character  
signal by using said memory.

13. A device according to claim 12, further  
comprising:

combining means for combining the character  
signal generated by said generating means with the video  
signal.

14. A device according to claim 13, wherein said  
combining means combines the character signal with the  
video signal the amount of information of which has been  
expanded by said expanding means.

15. A device according to claim 13, further  
comprising:

outputting means for outputting a video signal  
outputted from said combining means to a display device,  
said display device displaying an image represented by  
the video signal outputted from said expansion means.

16. A device according to claim 12, further  
comprising:

inputting means for inputting a video signal  
reproduced from a recording medium by a reproduction  
device and writing the reproduced video signal into said  
memory, said expanding means expanding an amount of

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information of the video signal written into said memory by said inputting means.

17. A device according to claim 12, wherein said memory has a first area for storing a video signal an amount of which is to be expanded by said expanding means, a second area for storing a video signal an amount of which has been expanded by said expanding means, and a third area which is different from said first area and said second area, said expanding means generating the character signal by using said third area.

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SUBA7/ 18. A device according to claim 12, wherein said memory has a first area which is to be accessed by said compressing means, and a second area which corresponds to an image plane represented by the video signal and which is different from said first area, and wherein said generating means comprises memory control means for writing into said second area a plurality of codes representing a value of pixel data of the character signal, and a table for outputting pixel data corresponding to codes read out from said second area.

19. A device according to claim 18, further comprising:

combining means for combining the character signal generated by said generating means with the video signal the amount of which has been expanded by said

expanding means,

the codes indicating a combining operation of said combining means, said combining means performing the combining operation in accordance with the codes.

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20. A signal processing device for processing a signal by using a memory, comprising:

processing means for processing a video signal by using said memory; and

generating means for generating a character signal by using said memory.

21. A device according to claim 20, wherein said processing means includes high-efficiency encoding means for compressing an amount of information of the video signal and for encoding the video signal.

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B2 22. A device according to claim 21, wherein said memory has a first area which is to be accessed by said high-efficiency encoding means, and a second area other than said first area, said generating means generating the character signal by using said second area.

23. A device according to claim 21, wherein said processing means further comprising error correction encoding means for error-correction-encoding the encoded video signal.

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24. A device according to claim 23, wherein said memory has a first area which is to be accessed by said high-efficiency encoding means, a second area which is to be accessed by said error correction encoding means, and a third area other than said first area and said second area, said generating means generating the character signal using said third area.

25. A device according to claim 20, wherein said processing means includes a high-efficiency decoding means for decoding the video signal and for expanding an amount of the decoded video signal.

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26. A device according to claim 25, wherein said memory has a first area which is to be accessed by said high-efficiency decoding means, and a second area other than said first area, said generating means generating the character signal by using said second area.

27. A device according to claim 25, wherein said processing means further includes error-correction-decoding means for correcting any error in the video signal.

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28. A device according to claim 27, wherein said memory includes a first area which is to be accessed by said high-efficiency decoding means, a second area which is to be accessed by said error correction decoding

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means, and a third area other than said first area and said second area, said generating means generating the character signal by using said third area.

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SUBA91 29. A recording apparatus, comprising:  
a memory;

compressing means for compressing an amount of information of a video signal by using said memory;

recording means for recording on a recording medium the video signal the amount of which has been compressed by said compressing means; and

generating means for generating a character signal by using said memory.

30. An apparatus according to claim 29, further comprising:

combining means for combining the character signal with the video signal.

31. An apparatus according to claim 30, wherein said compressing means compresses an amount of information of a combined video signal outputted from said combining means, said recording means recording the combined video signal outputted from said compressing means.

32. An apparatus according to claim 30, further comprising:

display means for displaying an image



represented by the combined video signal outputted from said combining means.

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33. An apparatus according to claim 29, further comprising:

reproducing means for reproducing from the recording medium the video signal the amount of which has been compressed by said compressing means, and for writing the reproduced video signal into said memory.

34. An apparatus according to claim 33, further comprising:

expanding means for expanding an amount of information of the reproduced video signal by using said memory; and

combining means for combining the character signal with the video signal the amount of which has been expanded by said expanding means.